UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BAKERSFIELD FIELD OFFICE
ENVIRONMENTAL ASSESSMENT

Orphaned Hotchkiss Lease Reclamation
Environmental Assessment #: DOI-BLM-CA-C069-2013-0018-EA

Chapter 1. Purpose and Need

Background

The Hotchkiss Lease is a former BLM Oil and Gas Lease (CAS 079816A) that is currently orphaned. It consists of an access road, an overgrown well/facility pad (approximately 0.5 acre), one well (Hotchkiss #24-25), 16 storage tanks, vessels and drums, a produced water sump, and a 3.5 mile gas pipeline. The Hotchkiss Well #24-25 and Hotchkiss Facility are located in the SE/SW quarter/quarter of Section 25, T. 30S, R. 20E, Mount Diablo Base and Meridian (MDBM), Kern County, California on the western slope of the Temblor Mountain Range.

The Hotchkiss Lease Agreement was established and became effective on September 1, 1965. To date, Hotchkiss Well #24-25 is the only well that was drilled on this lease. The operator of the lease died unexpectedly in 2004 leaving this lease orphaned without a responsible party. BLM production records show that the well ceased production in March 1996. The lease expired in November 2005 due to lack of production.

In January 2001, the land that this lease is located on was included within the Carrizo Plain National Monument (CPNM) boundary and thus could not be released to a responsible operator. Due to these factors, the lease fell back to the BLM with the responsibility to abandon the well, facilities, sump and pipeline.

BLM has worked in coordination with the California Division of Oil, Gas, and Geothermal Resources (CDOGGR) to abandon and reclaim this lease. CDOGGR has agreed to abandon the oil/gas well using state appropriated funds, leaving the abandonment of the facility, sump, and pipeline, removal of junk and debris, and reclamation to BLM. The project will be divided into three phases: (1) BLM will repair the access road, clear the well pad, and sample, remove and properly dispose of all fluids from the tanks and vessels. (2) CDOGGR will plug and abandon the well. (3) BLM will remove all storage tanks, vessels, pipelines (located on well/facility pad), junk and debris, remove all visibly contaminated soil, make slight adjustments to site contours (if needed), and re-vegetate using native species. The 3.5 miles of pipeline located outside the well pad are not a part of this EA.

Purpose and Need

The lease currently poses a health and safety hazard to the public, wildlife, and the environment. There are numerous open top vessels containing oil, which are entrapment hazards to wildlife. The well is also leaking natural gas into the air and polluting the environment. The leaking gas could also pose fire risk. There is a need to remediate these hazards and restore the area.

The purpose of the proposed action is to conduct final abandonment and restoration of this oil and gas lease and return the area to its natural function and conditions.

This environmental assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This document will disclose and analyze the environmental consequences that are anticipated to repair the access road, clear the well pad, sample, remove and properly dispose of all fluids from the tanks and vessels, plug and abandon the well, remove all tanks, vessels, pipelines (located on well/facility pad), junk and debris, remove all visibly contaminated soil, and restore the site.

Conformance with BLM land use plans

The proposed action falls within the Temblor Range sub-region of the CPNM Resource Management Plan (RMP) approved on April 10, 2010. This plan has been reviewed as required by 43 CFR 1610.5, and it has been determined that the proposed action conforms to the land use plan, goals, objectives, and management actions.

The RMP directs BLM to restore degraded and disturbed areas, including those impacted as a result of oil and gas activities. The CPNM RMP (pg. II-19 to II-20 and pg. II-73 to II-74) established objectives and management actions to restore native habitat, maintain natural processes, and to properly abandon wells. These objectives and management actions include:

- *Action BIO-8(I*):* Promote seed bank recharge. Restore or establish populations in suitable habitats, including new population sites and in previously cultivated or degraded areas. Store germplasm with the Center for Plant Conservation national collection of endangered plants.

- *Action BIO-48(I*):* Maintain and restore plant populations and communities, especially in areas of degraded habitat (for example, previously cultivated fields). Supplement natural processes with an active restoration program. Include mycorrhizae and biological soil crust organisms in restoration actions. Use vegetation management tools as described in Table II.B.4-1, Vegetation Management Toolbox. Choose the tool that achieves the desired objective, with a minimum of negative impacts to other botanical resources (grazing would not be used as a tool for botanical resource restoration).

- *Objective MNL-2(I*):* Manage existing leases to ensure ongoing interim and timely final restoration of leased lands so that they are returned to natural function and conditions.

- *Objective MNL-3(S):* Enforce good housekeeping requirements (that is, require operators to maintain a neat and orderly appearance of sites, remove junk and trash, and otherwise minimize landscape intrusions).

- *Objective MNL-4(I*):* Manage leases to minimize fragmentation of habitat (including removal of redundant roads and unused pipelines, storage tanks, and other infrastructure).

- *Action MNL-7(I*):* Review (in conjunction with operators) existing disturbed areas (such as roads and well pads) and require reclamation of those areas determined to be redundant or no longer needed. Conduct this review within one year of the effective date of this RMP.

- *Action MNL-8(I*):* Design roads, well pads, and facilities to impact and fragment the least acreage practicable. New facilities will be designed to maintain natural drainage and runoff patterns, reduce visual impacts, and reduce hazards to wildlife, especially California condors. Encourage operators to modify existing facilities when necessary to achieve the above objectives, and consider providing BLM funds to assist if requiring modifications is beyond BLM's authority on existing leases.

- *Action MNL-12(I*):* Require timely plugging and abandonment of depleted wells. This includes plugging the well bore with cement, removing all materials and equipment, and re-contouring/re-vegetating as specified in the conditions of approval.

Relationship to Statutes, Regulations and Other Plans

Oil and Gas Laws and Regulations

The CPNM contains a number of extractable minerals including oil and gas. These minerals are managed accordance with the *Mineral Leasing Act* of 1920, as amended: the *Mining and Minerals Policy Act* of 1970; the *Federal Onshore Oil and Gas Leasing Reform Act* of 1987; 43 CFR, Onshore Orders 1-8, NEPA; the *Energy Policy Act* of 2005; and other laws, regulations, orders, and also in accordance with all applicable state, county, and local laws and ordinances. The Energy Policy Act of 2005 requires establishment of a program to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells on lands administered by agencies within the Department of the Interior.

Endangered Species Act

The Endangered Species Act of 1973 (ESA) requires federal agencies to complete formal consultation with the United States Fish and Wildlife Service (FWS) for any action that "may affect" federally listed species or critical habitat. The ESA also requires federal agencies to use their authorities to carry out programs for the conservation of endangered and threatened species.

Formal consultation was completed on the CPNM RMP and on April 2, 2010 Biological Opinion (81420-2010-F-0089) was issued. The CPNM RMP Biological Opinion provides ESA compliance for the CPNM RMP and certain project level actions taken to implement the RMP, including the proposed action evaluated by this NEPA document. **The CPNM RMP BO contains measures for conserving listed species and their habitats that have been incorporated into the design features of the proposed action.**

This project is subject to compliance with the April 2, 2010 Biological Opinion. These types of actions to clean up and restore native habitat were analyzed in the RMP, and fully addressed in the April 2, 2010 Biological Opinion. No further consultation is required unless a re-initiation[1] clause is triggered.

[1]Re-initiation of consultation is required when discretionary Federal action has been retained and if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in the original opinion; 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in the original opinion; or 4) a new species is listed or critical habitat designated that may be affected by the action.

Additional recovery plans for endangered species include: Recovery Plan for the California Condor (USFWS 1996); Recovery Plan for Upland Species for the San Joaquin Valley (USFWS 1998); and the Recovery Plan for the Kern Primrose Sphinx Moth (USFWS 1984).

Master MOU between BLM and the California Department of Fish and Game (applicable for State listed Species)

Some areas within the Monument provide habitat for State listed wildlife and plant species. In a Master MOU between BLM and the California Department of Fish and Wildlife (Department), BLM agrees to notify the Department of all projects involving impacts to, or manipulation of, State-listed rare and endangered fish, wildlife and plants and to obtain State recommendations for the project-specific management of such populations. Activities addressed in the Carrizo RMP

were designed to be compatible with State listed species and other State Species of Special Concern. These actions were reviewed by the Department as part of the Carrizo RMP. BLM staff maintains close contact with individual unit biologists so that any new concerns can be addressed.

Carrizo Plain National Monument Proclamation

A Presidential Proclamation on January 17, 2001 established the Carrizo Plain National Monument for the purpose of protecting the biological, geological, paleontological, historic and prehistoric resources of this area. The monument is to be managed by the Secretary of the Interior through the Bureau of Land Management. It further states that, "The establishment of this monument is subject to valid existing rights."

Clean Air Act

The San Joaquin Valley Unified Air Pollution Control District has state air quality jurisdiction over the project area. Section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.) and regulations under 40 CFR part 93, subpart W, with respect to conformity of general Federal actions to the applicable State Implementation Plan (SIP) apply to projects within nonattainment and maintenance areas. Under those authorities "no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan." Under CAA 176(c) and 40 CFR part 93 subpart W, a Federal agency must make a determination that a Federal action conforms to the applicable implementation plan before the action is taken.

National Historic Preservation Act of 1966 as amended

Section 106 of the National Historic Preservation Act (NHPA) requires agencies to make a reasonable and good faith effort to identify historic properties that may be affected by an agency's undertakings and take those effects into account in making decisions. The BLM process for implementing this NHPA requirement is set forth in the *State Protocol Agreement Among the California State Director of the Bureau of Land Management and the California State Preservation Officer and the Nevada State Historic Preservation Officer (2012).*

Issues and Scoping

Scoping was initiated internally with the Bakersfield FO Resources staff on November 6, 2012, followed by an onsite inspection completed by Bakersfield FO Resources staff on December 3, 2012. Issues identified during the onsite and scoping include: a) potential effects to any cultural resources and applicable mitigation (avoidance and/or determination of eligibility for inclusion in the National Historic Register); b) potential impacts to threatened and endangered species, BLM sensitive species, and/or endangered species habitat and applicable avoidance and mitigation measures; and d) potential effects to visual resources.

Additionally, on January 10, 2013, BLM posted the proposed action on the BLM-CPNM web site. The posting included: BLM cover letter, and a copy of the proposed action. BLM did not receive any questions, negative comments, or concerns.

BLM will post the Environmental Assessment and draft Finding of No Significant Impact statement for a 15-day public comment period prior to issuing a decision record.

Chapter 2. Proposed Action and Alternatives

ALTERNATIVE 1: PROPOSED ACTION

The proposed action is to abandon the well, facilities, sump and pipeline and would include the following: repair the access road, clear the well pad, remove and properly dispose of all fluids from the tanks and vessels, properly abandon the well, remove all tanks, vessels, pipelines (located on well/facility pad), junk and debris, and remove all visibly contaminated soil. Holes made as a result of cleanup and abandonment actions will be filled or the walls made less steep. The approximately 0.5 acres disturbed on the well pad will be restored to native vegetation. Road disturbance will only require minor grading and disturbance will be minimal. The road will remain intact, if designated as such in the CPNM travel management plan. The work is proposed to begin in Spring, 2013 on BLM managed lands located in Sections 25 and 36, T. 30 S., R. 20 E., MDBM. The project location is Kern County, CA within the CPNM (Map 1).

Detailed project proposal:

1. The BLM will conduct sampling to characterize fluids and soils for disposal purposes. The sampling will include fluids from the 16 tanks, vessels and drums, and soil from the sump.
2. BLM will mobilize all necessary personnel and equipment to the site. This includes heavy equipment to complete the roadwork, access and demolition of the facility, and the removal of wastes in subsequent tasks. BLM's contactor will be housing workers onsite (alongside the lease access road), in a self-contained travel trailer during this project.
3. BLM will repair the access road as needed to facilitate heavy equipment to the well/facility pad in order to clear the pad, remove fluids from the tanks, vessels, and drums, abandon Hotchkiss Well #24-25, and demolish the Hotchkiss Facility. Most of the road repairs will be conducted in the NW quarter of Section 36, T30S, R20E, MDBM. This road is currently classified as a BLM Resource Road. The anticipated repairs will return the road to a minimum of 10 feet wide in the straight-a-ways and 15 feet in the corners to allow site access by tractor trailer rigs. BLM will use a bulldozer to improve the access road. Minor grading will be done to remove ruts, channels, and rocks. Drainage channels along the road will be maintained in a functional state. Measures will be taken to minimize dust.
4. BLM will clear vegetation from the existing well/facility pad to allow a vacuum truck access to remove fluids, abandonment crew access to plug and abandon Hotchkiss Well #24-25, and access to demolish the facility. It is estimated that the pad is approximately 0.5 acres. Removed vegetation will remain on site for later use as surface rehabilitation material.
5. Based on the results of the waste characterization analysis, BLM will remove, consolidate, or segregate the oil and water present in the 16 permanent and temporary drums, tanks, and vessels. The fluids will be collected and transported to a BLM approved disposal or recycling facility. These materials will be transported under a Hazardous or Non-Hazardous Waste Manifest dependent on the respective laboratory analysis and waste profile. It is estimated that approximately 122.5 barrels of oil/water will be removed. Where applicable, BLM will excavate to expose pipeline ends to allow the lines to be disconnected and drained. The shallow excavations will be lined with plastic to protect the existing soil from leaks or spills. Any remaining tank bottoms will be consolidated into 10 55-gallon drums and stored on site until proper waste characterization and profiling can be conducted. The tanks, vessels and well facility piping will then be rinsed with a solution of water and non-toxic, biodegradable detergent. All rinsate will be pumped into a temporary holding tank for proper disposal/recycling.

6. CDOGGR will move in to plug and abandon Hotchkiss Well #24-25 well in accordance with the existing BLM and CDOGGR regulations and requirements. They will move in a rig crew, conventional pulling hoist rig, pump truck, bulk truck (cement), vacuum truck (water), and a portable tank (well returns). It is estimated that the abandonment crew will be on location for 3 days. After the well is plugged to surface, CDOGGR will excavate the well head and cut the casing off 5 feet below surface. A steel plate will be welded on top of the casing and then the casing will be buried (see Appendix I for detailed well abandonment procedure).
7. BLM will sample, characterize, and profile the waste of the consolidated tank bottoms stored in the 10 55-gallon drums for disposal.
8. BLM will remove the consolidated tank bottoms stored in the 10 55-gallon drums and dispose at a BLM approved disposal site.
9. Facility Demolition:
    a. Remove all solid metal hatches from the tanks and replace with expanded metal covers to allow the tanks to ventilate before demolition and to prevent the use of these tanks by wildlife.
    b. Isolate and disconnect all fuel, water, and gas pipelines from the tanks, and isolate and disconnect all electric lines.
    c. This geographic area is subject to an extreme wild land fire hazard. All hot metal cutting will need a Hot Work Permit from the BLM Fire Program. Whenever possible, metal cutting will be done with cold cutting tools and shears. A fire watch will be posted at all times when metal is being cut. The BLM contractor will maintain sufficient water and firefighting tools on-site to suppress any accidental fire starts. They will also maintain the capability to contact emergency responders during all phases of the work on site.
    d. Plastic sheeting will be laid down to catch all lead paint chips discharged during the removal and shearing of all metal. Paint chips will be collected and disposed of under the appropriate Hazardous Waste Manifest at a BLM approved treatment, storage, and disposal facility.
    e. Remove all drums, tanks, vessels, pipelines, electrical conduit, concrete, valves, scrap metal, fencing, netting, vehicles, junk, and trash for disposal at a BLM approved disposal facility.
    f. Remove all buried pipelines, oily soil, wood, metal, junk, and trash for disposal at a BLM approved disposal facility.
    g. Excavate to remove all visibly stained soil from below tanks, vessels, pipelines, and sump. It is estimated that 100 cubic yards of soil will be removed. The excavated soil will be placed temporarily on/under 6-mil visqueen while awaiting disposal profile approval from BLM.
    h. After removal of stained soil, BLM will collect confirmatory soil samples under the tanks and the sump for laboratory analysis. These analyses will be utilized for waste profiling and to determine if additional excavation is required.
    i. Once the disposal profile is approved, BLM will load the contaminated soil into end-dump trucks for transportation and disposal at a state licensed disposal facility.
    j. Following approval, BLM will re-contour excavation sites to minimize steep-walled pits or other hazards. Materials to be used for this purpose will come from the adjacent surface of the well pad (previously disturbed soils) or using soils from the debris slope

located on the north side of the pad. The backfill material will be moisture conditioned, placed in one-foot lifts, and compacted by track walking with on-site heavy equipment. Because there has been extensive colonization by native vegetation, original contours of the site will not be restored. In consultation with BLM biologists, areas disturbed as a result of the abandonment and clean-up actions will be modified to eliminate large holes and mimic natural contours and drainages.

10. BLM will replant the site with native seed, primarily saltbush. Other species may be used, as available, including bladderpod, native bunchgrass, and local wildflower species.

Design Features Associated with the Proposed Alternative

The following design features would be included as part of the proposed action:

As a result, in the event that cultural resources are discovered during the course of this project, all work must cease in the vicinity of the discovery and the BLM Archaeologist must be notified in order to identify proper mitigation or avoidance measures. If these remains are Native American, this will include consultation with local tribes regarding these actions.

The fresh water spring box, pipeline and cattle trough at the north edge of the well pad will remain in place and must be at least as functional at the end of the project as they were at the beginning of the project. Any damage to the pipelines transporting water from the springs to private property as a result of project activity will be repaired.

The well pad and all roads will remain intact at the end of this phase of the project.

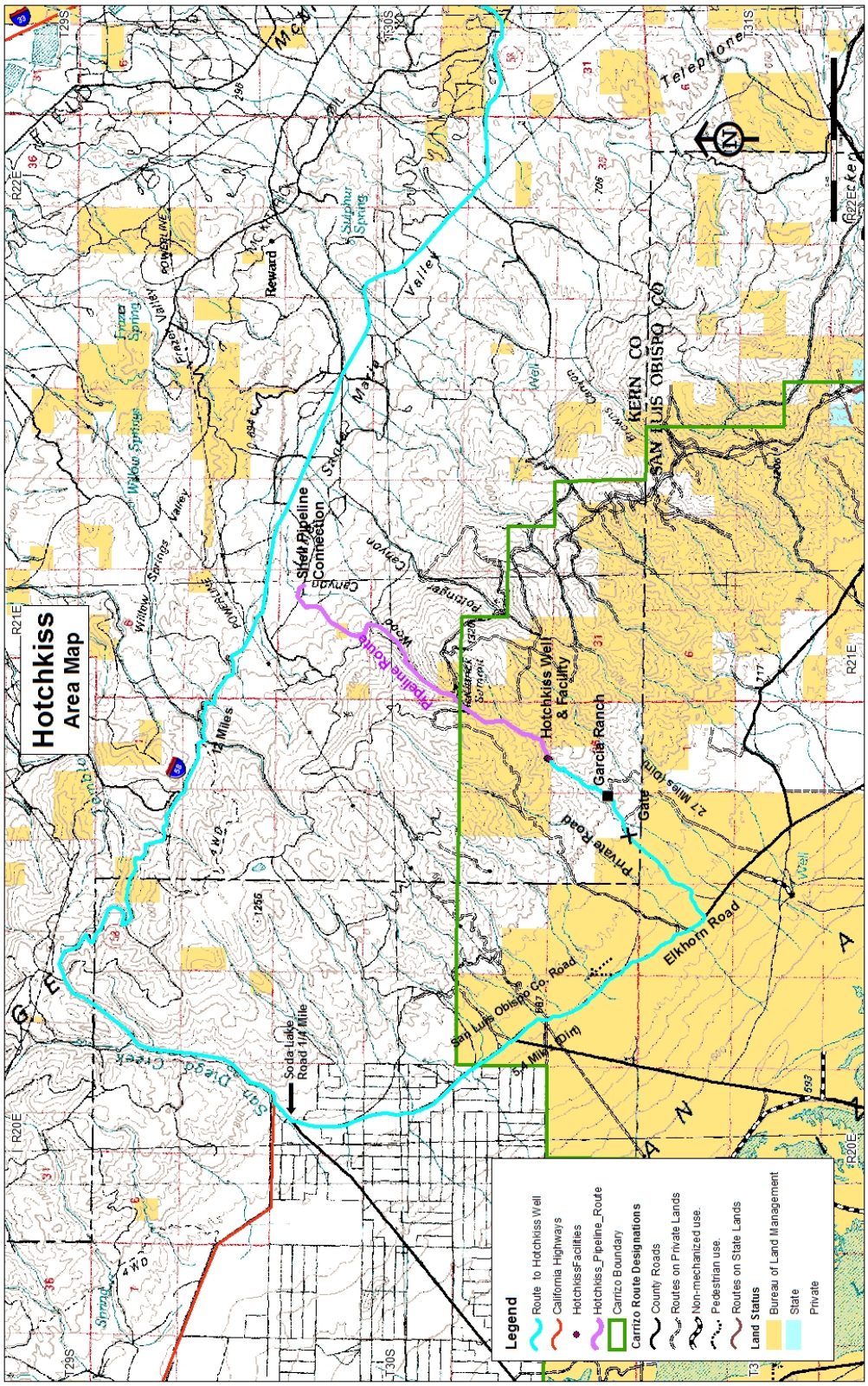
To minimize impacts to wildlife and vegetation at the project site and during ingress and egress:

- Vehicle speed limits would be limited to the minimum reasonable speed to reduce potential for road kills. (Vehicle speed will not exceed 20 mph on BLM-administered roads in endangered species habitats).
- All persons involved in project construction work would be informed of listed species in the project area and specific measures that must be taken to avoid impacts to these species.
- Timing of activities would be planned to minimize impacts to sensitive resources including nesting birds in equipment and vegetation found on the site.
- Excavated pipes will be quickly removed, raised from ground level or capped to prevent animals from entering or otherwise be thoroughly inspected for entrapped animals and allowed to escape before being moved or destroyed.
- Workers will be advised to check equipment and debris before removal and allow any wildlife present to escape unharmed.
- Removal of vegetation will be limited to that necessary for well access and material removal,
- Road improvement will be limited to that absolutely necessary for equipment access to the site.

ALTERNATIVE 2: NO ACTION

BLM would not conduct this project to abandon Hotchkiss #24-25 and the associated facility. The orphaned lease would continue to pose a health and safety hazard to the public, wildlife, and the environment. There are numerous open top vessels containing oil which are entrapment hazards to wildlife. The well is also leaking natural gas into the air and polluting the environment. The leaking gas could also pose a fire risk.

Map 1: Map of Hotchkiss Well #24-25 and associated facility.



Chapter 3. Affected Environment

This chapter briefly describes the affected environment for elements that may be affected by the proposed action.

The following elements of the human environment, fire and fuels management, and lands with wilderness characteristics were considered, but determined to be either not present or unaffected by the proposed action and will therefore not be addressed further in this analysis. This project location does not occur within a designated Area of Critical Environmental Concern. The project does not contain essential fish habitat, and there are no wetlands or riparian zones in the project area. The project would not affect low income or minority populations. The proposed project would not affect the recreational experience of the visitors of the CPNM.

National Landscape Conservation System (NLCS), including National Monuments

The Carrizo Plain is the largest and most important remnant of what remains of the San Joaquin Valley ecosystem. It provides habitat for numerous threatened, endangered and sensitive species of plants and animals and is the site of the largest remaining alkali wetland in Southern California.

In 2000, the National Landscape Conservation System (NLCS), comprised solely of BLM lands, was created with the mission to "…conserve, protect, and restore these nationally significant landscapes that have outstanding cultural, ecological and scientific values for the benefit of current and future generations." The NLCS units include BLM-managed: national monuments, national conservation areas, certain national trails, wild & scenic rivers, designated wilderness, and wilderness study areas.

The Carrizo Plain was designated a National Monument on January 17, 2001, at which time it became part of the NLCS. The proclamation established the monument for the purpose of protecting the biological, paleontological, historic and prehistoric resources on approximately 247,000 acres. Specific biological resources of the monument are discussed further in the Biological Resources section of this EA. Specific historic and prehistoric resources are discussed further in the Cultural Resources section. The proclamation further states that, "Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument."

The orphaned Hotchkiss Lease is located within the CPNM. A resource management plan (RMP) was developed to provide direction for managing the approximately 247,000 acre CPNM within the context required by the Monument Proclamation. The proposed project is in conformance with the CPNM RMP and, as described in Chapter 1, implements management actions to further the goals and objectives identified in the RMP, therefore, NLCS will not be addressed further in this analysis.

Cultural Resources

Cultural resources, including both prehistoric and historic resources, represent a continuum of events from the earliest evidence of humans on the Carrizo Plain through the historic period. Archaeological site types associated with Native American occupation include pictograph sites, large villages and small camps. Historic period cultural sites found throughout the CPNM include the remains of structures and infrastructure associated with ranching and fluid mineral exploration and development.

A Class III (intensive) cultural resources inventory (BLM CRIR# LLCAC06000-922) was conducted for the proposed project area. The proposed project area consists of an existing well pad and road for which

there were no earlier records indicating that this location had been surveyed for the presence of cultural sites. The only cultural remains discovered as a result of this survey consisted of the infrastructure associated with the Hotchkiss well.

Several pieces of equipment associated with the development and operation of the Hotchkiss oil well are present within the project area. This includes storage tanks, pipelines, a vehicle and the well head. Many of these features are less than fifty years old and are therefore exempt from further cultural resources review. Two of the tanks date to the mid-1930's and were evaluated for their potential eligibility for the National Register of Historic Places (NRHP) which defines potential historical significance. Due to a lack of historical context and integrity these features did not meet NRHP criteria for eligibility. As a result, there are no significant cultural resources located within the proposed project area and the removal of these features will not impact cultural resource values.

Since the proposed action alternative will not have direct or indirect affects to cultural resources, they will not be addressed further in this analysis.

Native American Values

The proposed project area lies primarily within the traditional territory of the Northern Chumash tribe. There is also some evidence that members of the Salinan tribe may have also occupied the northern portion of the Cuyama Valley. The San Joaquin Valley Yokuts tribes also occupied the Carrizo Plain immediately to northeast. The actual Carrizo Plain, lies immediately west of the proposed project area, contains many significant Native American heritage sites. The BLM closely coordinates with members of the local Native American community and the Carrizo Plain Native American Advisory Committee for all actions occurring within the CPNM. These people place significant value on their traditional heritage sites. These places include historical and spiritual sites as well as resource use areas such as locations where traditional plant resources are gathered.

A certified letter containing a description of the proposed project and a map showing its location was mailed to members of the local Native American community with traditional ties to the proposed project area location and the chairman and other participants in the Carrizo Plain Native American Advisory Committee, requesting information regarding any places of traditional importance to these groups that may be impacted by this proposed project. One of the recipients, Mr. Freddy Romero, the Cultural Resource Specialist for the Elders Council of the Santa Ynez Band of Chumash Indians, called to obtain details regarding the nature and location of the proposed project. Based upon this information, he stated that his council had no concerns regarding this project. None of the other recipients of these letters indicated that any places of traditional cultural or religious importance would be affected by the proposed project.

Since all action alternatives will not have direct affects to Native American values, they will not be addressed further in this analysis.

Paleontological Resources

The proposed project area is located within an area with moderate to high sensitivity for the occurrence of significant paleontological resources. However, due to the location of this proposed project on a previously constructed well pad and within areas of existing disturbance, no potentially significant paleontological deposits will be impacted during the course of proposed project construction or maintenance.

Since the proposed action alternative will not have direct effects to paleontological resources, they will not be addressed further in this analysis.

Visual Resource Management

The Hotchkiss well is located deep in a canyon on the Temblor Range. The CPNM RMP directs this area to be managed as Class II VRM that is to retain the existing character of the landscape; this means the level of change should be low and those management activities that can be seen should not attract the eye of the casual observer. The steepness of the canyon effectively screens the well location from view from Elkhorn Road and the well development infrastructure is not seen until you are at the site.

Since the proposed action will not have direct effects to visual resources, they will not be addressed further in this analysis.

Air Quality

The proposed project area is located in Kern County, California, and within the San Joaquin Valley Air Basin. At the state level, air regulatory duties lie with the California Air Resources Board (CARB) and at the federal level with the U.S. Environmental Protection Agency (EPA), Region 9. Oversight authority for air quality matters in California has been delegated to the county (District) level. The BLM has air program responsibilities through its permitting programs and Clean Air Act (CAA) requirements to analyze all actions for conformity to air quality plans. The BLM is further committed to comply with the procedures outlined in a recent Air Quality MOU (effective June 23, 2011) with the DOI, the USDA, and the EPA; this MOU outlines a common framework for analyzing and mitigating impacts to air quality and AQRVs associated with Federal oil and gas decisions through the NEPA process.

The federal Clean Air Act (CAA), as amended, and the California Clean Air Act (CCAA) contain the primary provisions relating to air quality. Provisions of the federal CAA that apply to BLM actions include the National Ambient Air Quality Standards (NAAQS), nonattainment area designation, the development of state implementation plans (SIPs), prevention of significant deterioration (PSD), air toxics, and federal conformity. The U.S. EPA, CARB, and regional air districts have issued rules to implement federal and state Clean Air Acts.

EPA uses these “criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). One set of limits (primary standard) protects health; another set of limits (secondary standard) is intended to prevent environmental and property damage. Under the federal CAA, the U.S. EPA has established NAAQS for seven criteria pollutants: ozone, respirable particulate matter (PM10), fine particulate matter (PM2.5), carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. California has established state Ambient Air Quality Standards for the same criteria pollutants, plus an additional 3 pollutants (visibility reducing particulates, sulfates, and hydrogen sulfide). States may have standards that are more restrictive than the federal thresholds, but they cannot be less restrictive. Although more stringent, the State standards have no specific dates to attain, unlike federal standards. Under State law, designations are made by pollutant, rather than by averaging time. A geographic area that meets or exceeds the primary standard is called an attainment area; areas that do not meet the primary standard are called nonattainment areas. (http://www.epa.gov/air/caa/peg/).

Federal air quality standards for PM2.5 and ozone have been exceeded in the San Joaquin Valley air basin due to locally generated and/or transported in pollutants. This has resulted in the current designation of the air basin as a federal non-attainment area for PM2.5 and ozone under the NAAQS. The air basin has recently been designated as a federal maintenance area for PM10. Based on the EPA 2010 designations, the primary pollutants of concern in the Project area are 8-

hour Ozone, PM 10, and PM 2.5. The remaining criteria pollutants are either unclassified, or in attainment with the NAAQS.

The proposed project areas are within the EPA Pacific Southwest Region 9 Planning Area; a State Implementation Plan (SIP) has been prepared for the planning area, which identifies sources of emissions and control measures to reduce emissions. In 2007, CARB adopted the State Strategy for achieving emissions reductions toward bringing these areas into attainment with federal standards for ozone and PM2.5. The SIP mainly addresses stationary sources that have been identified as major contributors affecting regional air quality, such as power plants, facilities, etc.

District air quality plans that have recently been adopted and are relevant to the proposed Project include the *SJVAPCD 2007 Ozone Plan*, and the *2007 PM10 Maintenance Plan*. These plans outline the strategy for achieving federal air quality standards by specific dates and identify control measures to reduce criteria pollutant emissions. Control measures identified in the *2007 Ozone Plan* reduce ozone precursor emissions, NOx and Volatile Organic Compounds (VOCs). Particulate matter attainment strategies include control measures to reduce dust from unpaved roads and construction activities.

Conformity Determination

The classification of any area as a federal nonattainment and/or maintenance area brings an additional requirement for federal agencies. Section 176(c) of the CAA, as amended (42 U.S.C. 7401 et seq.), and regulations under 40 CFR, part 93, subpart W, state that "no department, agency or instrumentality of the federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan." This means that under the CAA 176(c) and 40 CFR, part 93, subpart W (conformity rules), federal agencies must make a determination that proposed actions in federal nonattainment areas conform to the applicable EPA approved implementation plans (if pertinent) before the action is taken.

Soils

Project area soils are described in the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) soil survey of Kern County, California, Northwestern part. Soils are classified as belonging to the Kilmer series and are derived from shale or limestone. Runoff is medium or rapid and the potential for erosion is medium. The project site is a flat pad, and there is no evidence of major erosion on the pad, nor on the heavily vegetated pad slope to the south. The steep cut slope on the north side of the pad is naturally eroding as the slope regains the angle of repose for the parent material. Some soils are contaminated with oil, especially those lining the sump. Other soils surrounding the tanks and other infrastructure may be contaminated by lead-based paint.

There are no soils in the project area are designated as Prime Farm Lands.

Water Quality Drinking–Ground

The project area is within the Carrizo Plain water basin of the Central Coast Hydrologic Region. The Carrizo RMP (pg. III-34 to III-35) provides additional information on water resources in the Bakersfield Field Office Planning Area and is hereby incorporated by reference.

Surface Water:

There are no rivers, lakes, or streams that contain surface water year round at or near the Hotchkiss well facilities. There is an ephemeral stream to the south of the project site and along portions of

the access road. In one section of the canyon, the streambed has been confined to a channel along the road. This is an ephemeral stream and only flows for short periods of time after large rain events. Surface water is not present in all years. No riparian vegetation is present within the stream channel. A water trough is located at the eastern edge of the project area. Water for this trough is piped from a spring farther up the canyon.

Groundwater:
Analysis of groundwater in the Carrizo Plain Groundwater Basin indicates that much of it is highly mineralized. Total dissolved solid content ranges from 161 to 94,750 mg/L (www.water.ca.gov). Some soil on the project site may be contaminated with waste oil. Both materials have the potential of leaching into the groundwater.

Biological Resources

Vegetation on the well pad is relatively dense saltbush scrub, dominated by common saltbush (*Atriplex polycarpa*), with an understory of non-native grasses and assorted disturbance-adapted, native annuals. The saltbush has colonized the pad in the last decade, since the end of active work on the pad. Vegetation in the surrounding area is a mixture of sparse to dense saltbush scrub, scattered juniper (*Juniperus californica*), and much bare or near-bare rocky slopes. Besides common saltbush, other shrubs present include snakeweed (*Guiterrezia californica*), alkali goldenbush (*Isocoma acradenia*), and bush lupine (*Lupinus albifrons*). Smaller native plants include miner's lettuce (*Claytonia*), chia (*Salvia columbaria*), blazing star (*Mentzelia pectinata*), annual buckwheats (*Eriogonum* spp.), and lupines (*Lupinus* spp.). Non-native plants present includes species such as red brome, (*Bromus madritensis* var. *rubens*), filaree (*Erodium cicutarium*), Mediterranean grass (*Schimus* spp.), and Russian thistle (*Salsola* sp.). Biological crusts are well-developed in portions of the surrounding hillsides, but only early successional mosses are present on the well pad (project) area.

Wildlife species typical of the area include mammals such as black-tailed jackrabbit, desert cottontail, California ground squirrel, San Joaquin antelope squirrel, Botta's pocket gopher, Heerman's kangaroo rat, California pocket mouse, San Joaquin pocket mouse, deer mouse, southern grasshopper mouse, dusky-footed desert woodrat, coyote, San Joaquin kit fox, bobcat and muleblack-tailed deer. Various bats species, such as pallid bat, western pipistrelle, California myotis, western small-footed myotis, fringed myotis and Mexican free-tailed also make use of the general area. Reptile species include side-blotched lizard, western whiptail, fence lizard, western rattlesnake, coachwhip and gopher snake. Amphibian species such as western toad, pacific tree frog and western spadefoot toad are known from the general area. Common bird species for the project area includes turkey vulture, red-tailed hawk, golden eagle, prairie falcon, American kestrel, California quail, mourning dove, greater roadrunner, barn owl, hummingbirds (most commonly Anna's, rufous and Allen's), Say's phoebe, loggerhead shrike, common raven, western scrub jay, California thrasher, California towhee, spotted towhee, phainopepla, house finch, sage sparrow, lark sparrow and white-crowned sparrow.

The abandoned tanks, vehicle and equipment at the project site are used by wildlife, such as woodrat, deer mice, birds, and lizards, for cover and shelter, including nesting habitat. Small mammal burrows are scattered throughout the project area and along the edges of the access road.

No rare plants are expected to occur within the project footprint, including the access road. Special status animal species that may occur or make use of the project footprint include San Joaquin kit fox, San Joaquin antelope squirrel, San Joaquin pocket mouse and southern grasshopper mouse. In addition to the species listed above, giant kangaroo rat and blunt-nosed leopard lizard occur along the Elkhorn Plain Road which will be used to access to the site.

Grazing Management

The project falls within an area proposed for the establishment of a grazing allotment on which livestock may be allowed to be used only for the purposes of vegetation management that serves the objectives of the Monument.

Lands

The following easements fall within proposed project area:

- A perpetual non-exclusive 40' easement for ingress/egress for residential and agricultural use to private property. The road located along this easement is also used to access the well pad. Portions of the road will be repaired in order to allow heavy, long wheel based vehicles access to the well pad.
- A non-exclusive easement for two 20' x 20' areas around two existing water springs along with the right to obtain water for agricultural purposes to serve private property. The spring boxes are located on the well pad. There is a small chance that damage could occur to the spring boxes during heavy equipment operations.
- A 40' easement for operation and maintenance of pipelines transporting water from the springs to private property. The pipelines run along the access road and cross the access road in one location. There is a small chance that the pipelines could be damaged while repairing the access road.

Chapter 4. Environmental Impacts

Air Quality

Proposed Action:

Project emissions include NOx, VOCs/ROG, PM_{10} and $PM_{2.5}$ associated with combustion sources such as construction equipment (i.e., dozers, backhoe, grader, etc.), equipment trucks, well servicing rig/crew/vehicles, and hauling of liquids. In addition, localized impacts to air quality will occur during road and well pad repair as a result of soil disturbance and fugitive dust emissions. These air quality impacts will be minor and temporary in duration, and will cease upon project completion.

Particulate emissions will increase during grading. Support vehicle use on unpaved access roads will generate small amounts of particulate emissions and could carry soils onto paved roads which would increase entrainment PM-10 emissions. In addition, vehicles and heavy equipment used for grading and the hauling of materials emit various precursor emissions for ozone. Direct emissions from the proposed action will be temporary, localized and minimal.

The proposed project would result in minimal emissions that are *de minimus*. The project is therefore exempt from conformity determination (40 CFR Part 93.153).

No Action:

The well would continue to leak natural gas into the air and continue emitting hazardous air pollutants into the environment creating a hazardous condition for humans and animals in the general area.

Soils

Proposed Action:

Direct impacts to soils would include a limited amount of disturbance during the repair and grading of the access road, and a disturbance of soils previously disturbed during the construction of the well pad. The disturbance footprint of the project is less than 1.0 acre in size. The level terrain of the well pad would not be expected to generate erosion concerns. Re-vegetation actions following site cleanup will help minimize any potential for erosion. Contamination of soils would end with removal of soils already contaminated and removal of oil and lead-based paint still present on the site.

No Action:

Contaminated soils would remain. There is a potential for additional soil contamination as tanks and infrastructure deteriorate.

Water Quality Drinking–Ground

Proposed Action:

Work on the well pad will not impact the nearby ephemeral stream. Repair and grading of the access road would include grading a low water crossing where the ephemeral stream crosses the road, however, this will not interfere with normal hydraulic processes and the potential for increased erosion is low.

As a result of properly abandoning the well the risk of casing failure and the resulting contamination of groundwater will be reduced. In addition, removing contaminated soils will eliminate the risk of contaminating groundwater.

No Action:

There would be potential impacts to water quality from the no action alternative by the leaching of hydrocarbons and heavy metals from the contaminated soils currently on site. The potential risk of groundwater contamination from casing failure would also remain.

Biological Resources

Proposed Action:

Abandonment of the well, and removal of facilities and debris will disturb approximately 1 acre. Although the area has been previously disturbed, much of the area supports dense stands of saltbush that will need to be removed for access to the well and to allow removal of materials and contaminated soil. Although saltbush seed will be collected and scattered on the site after work has been completed, it may take several to ten or more years before mature saltbush is restored to the immediate work site. Since the surrounding area, including upslope areas which can provide an additional seed source, support extensive stands of mature saltbush, loss of the 1 acre will not have an impact on the quality and quantity of saltbush scrub habitat in the general area.

Wildlife will be temporarily displaced from the area during removal and abandonment activities. Wildlife that inhabits the abandoned facilities and debris will be displaced and possibly injured. Wildlife displaced from the facility will need to relocate. While there is a potential for direct injury of wildlife or disturbance of their reproductive effort, design features incorporated into the proposed action will minimize these impacts. Due to the localized extent and short term duration of these activities, long term impacts to wildlife are not expected.

Once the well has been abandoned and the material removed, biological resources will benefit in the long-term from proper abandonment of the well, and removal of the materials and contaminated soil. The risk of environmental contamination, ingestion of toxic materials or entrapment in oil or other materials will be eliminated.

Any impacts to federally listed species, such as the San Joaquin kit fox, blunt-nosed leopard lizard and giant kangaroo rat are covered by the April 2, 2010 Carrizo Plain National Monument Resource Management Plan Biological Opinion. Measures from the 2010 Biological Opinion have been incorporated into the design features of the project proposal and that must be complied with.

No Action:
There would be a continued risk of wildlife entrapment in contaminated oil or other fluids. There would also be a continued risk of ingestion of toxic materials by wildlife, as well as environmental contamination.

Grazing Management

Proposed Action:
No livestock are expected to use the lands in or surrounding the allotment during the project activities. If livestock were expected to be present, the proposed action may cause disturbance to livestock distribution within the immediate area surrounding the well site. These disturbances are expected to be minor and not cause any substantial impacts to livestock grazing operations or opportunities on the allotment.

No Action:
There would be no impacts to livestock grazing management as result of the no action alternative.

Lands

Proposed Action:
The proposed action may cause damage to the spring boxes and buried water pipelines. The impacts are expected to be temporary and no permanent damages are expected. Any damage to pipelines would be repaired and brought back to its functioning state prior to proposed action.

No Action:
There would be no impacts to the road or pipelines as a result of the no action alternative.

CUMULATIVE IMPACTS

Air Quality:
The cumulative effects analysis areas for air resources are the San Joaquin Valley air basin. This area includes the San Joaquin Valley, CA (extreme) federal 8-hour ozone nonattainment area; the San Joaquin Valley, CA federal PM2.5 nonattainment area; and the federal San Joaquin Valley, CA PM10 maintenance area. The expected emission levels from the proposed action are within the levels in the SIP attainment demonstrations. These emission levels are also within the federal PM10 maintenance area and the 8-hour ozone and PM2.5 nonattainment areas cumulative NAAQS emissions standards and are not likely to result in or contribute to exceedance of the National Ambient Air Quality Standards. Therefore, the proposed action would not contribute to cumulative effects to air quality in the San Joaquin Valley air basin.

Chapter 5. Consultation and Public Involvement

Native American Consultation

Certified letters containing a description of the proposed project and a map of the location were mailed to both federally and non-federally recognized tribes and members of the Native American community with known cultural affiliation to the project area and the Carrizo Plain National Monument, including members of the Carrizo Plain Native American Advisory Committee. One of the recipients, Mr. Freddy Romero, the Cultural Resource Specialist for the Elders Council of the Santa Ynez Band of Chumash Indians, called to obtain details regarding the nature and location of the proposed project. Based upon this information, he stated that his council had no concerns regarding this project. None of the recipients indicated that this project would impact places associated with Native American traditional cultural or religious values.

The following entities were notified:

Mr. Neil Peyron Ryan Garfield, Chairman, Tule River Reservation
Ms. Kerri Vera, Director, Environmental Program, Tule River Reservation
Mr. Ruben Barrios, Chairman, Santa Rosa Rancheria
Mr. Lalo Franco, Cultural Resources Program Director, Santa Rosa Rancheria
Mr. Vincent Armenta, Chairman, Santa Ynez Band of Cumash Indians
Mr. Joe Talaugon, Chairman, Elders Council, Santa Ynez Band of Cumash Indians
Mr. Freddy Romero, Cultural Resources Specialist, Elders Council, Santa Ynez Band of Cumash Indians
Mr. Michael Khus-Zarate, Chairman, Carrizo Plain Native American Advisory Committee
Mr. Robert Duckworth, Vice-Chairman, Carrizo Plain Native American Advisory Committee and Salinan Representative
Mr. Fred Collins, Northern Chumash Tribal Council
Ms. Mona Tucker, Chairperson, Northern Chumash, yak tityu tityu
Mr. Julio Quair, Bakersfield Chumash
Mr. David P. Domiguez, Chumash Council of Bakersfield
Mr. Lei Lynn Odom, Chumash Elder
Pilulaw Khus Zarate, Elder, Northern Chumash Bear Clan

Biological Consultation

Formal consultation was completed on the Carrizo RMP and an April 2, 2010 Biological Opinion (81420-2010-F-0089) was issued. The Carrizo RMP Biological Opinion provides ESA compliance for the Carrizo RMP and certain project level actions taken to implement the RMP, including the proposed action evaluated by this NEPA document. The Carrizo RMP BO contains measures for conserving listed species and their habitats that have been incorporated into the proposed action.

Persons, Groups and Agencies Consulted

Gary Philbrick, CDOGGR - Idle Well Engineer
Eric Stewart, Adjacent Land Owner
Joe W. Garcia, Adjacent Land Owner
Jeff Kuyper, Los Padres Forest Watch

Craig Deutsche, Monument Advisory Committee
Cal French, Volunteer; Monument Advisory Committee attendee
Pat Vessart, Volunteer; Monument Advisory Committee attendee

Summary of Public Participation

The BLM posted a copy of the Proposed Action on the BLM-CPNM website for public comment for a 15-day period.

BLM will post the Environmental Assessment and draft Finding of No Significant Impact statement on the BLM-CPNM website for a 15-day public comment period prior to issuing a decision record.

List of Preparers

Tamara Whitley, Archaeologist
Karen Doran, Rangeland Management Specialist
Amy Kuritsubo, Wildlife Biologist
Denis Kearns, Botanist
Kathy Sharum, Wildlife Biologist
Ryan Cooper, Recreation Planner
Sue Porter, Planning and Environmental Coordinator
Kent Varvel, Environmental Protection Specialist
Kevin Coodey, Petroleum Geologist
Gabriel Garcia, Assistant Field Manager, Minerals
Johna Hurl, Carrizo Plain National Monument Manager

References

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U.S. Fish and Wildlife Service (USFWS). Recovery Plan for Upland Species of the San Joaquin Valley, California. 1998.

U.S. Fish and Wildlife Service (USFWS). 2011. Condor #112 tracking information September 2010. Internal Document.

www.epa.gov/air/caa/peg/

www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/3-19.pdf

Appendix 1

Detailed well abandonment procedure for Hotchkiss Well #24-25:

1. Move in and rig up (MIRU) abandonment rig. BLM/ California Division of Oil, Gas and Geothermal Resources (CDOGGR) must be notified at least 24 hours prior to commencement of operations. Abandonment permit must be on location with abandonment crew.
2. Kill well, Install Blowout Prevention Equipment (BOPE)
3. Pull tubing, measuring each joint on the way out.
4. Remove artificial lift components.
5. Run in the hole open ended (RIH OE) with tubing.
6. Pick up (PU) additional joints as needed, tag bottom.
7. Plug back to total depth (PBTD) = 4720'
8. If fill exists the well must be cleaned out to at least 3200' CDOGGR or BLM to witness clean out (CO).
9. Pull tubing back to 50' above CO depth.
10. Rig up (RU) cementers
11. Stage Class "G" cement from CO depth to 2950' in multiple stages.
12. PU 100' above theoretical Top of cement.
13. Reverse circulate clean and wait on cement (WOC) 6 hours or overnight as time permits.
14. Tag top of cement with tubing. Top of cement (TOC) must be at 2950' or above. CDOGGR or BLM to witness location and hardness.
15. Displace hole fluid with inert mud with corrosion inhibitor added to above the Base of Fresh Water if it exists in this area. Or to surface if not.
16. PU tubing to 100'
17. Pump Class "G" cement from 100' to surface and fill any annulus to surface. CDOGGR or BLM to witness cement to surface.
18. Top off cement as necessary.
19. Excavate to a depth of 5 feet.
20. Cut all strings off at 5' below surface. CDOGGR or BLM to witness cutoff and plate.
21. Weld on steel plate identified with API number
22. Backfill excavation.